

REMARKS

The indication that claim 2 is objected to, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, is acknowledged.

By the present amendment, claim 1 has been canceled with dependent claim 2 being rewritten in independent form, such that objected to claim 2 should now be in condition for allowance. Additionally, claim 3 has been amended to depend from claim 2, such that this claim should also be in condition for allowance with parent claim 2. Furthermore, claim 4 has been written in independent form and claims 5-7 have been canceled without prejudice or disclaimer of the subject matter thereof, it being noted that claims 6 and 7 stand withdrawn from consideration as being directed to a non-elected invention, such that these claims have been canceled without prejudice to the right to file a divisional application directed thereto.

With regard to the objection to the drawings that Figs. 4-7 should be designated by legends such as --Prior Art--, submitted herewith is a proposed drawing correction and a corrected drawing, wherein Fig. 4 is labeled as "Prior Art". Applicants submit that Figs. 5-7, as is apparent from the description in the specification, are representative of information developed by the inventor and utilized in obtaining the features of the present invention. Thus, Figs. 5-7 are not considered to be prior art and have not been labeled as such. Applicants request acceptance of the drawings as now presented herein.

As to the rejection of claim 5 under 35 U.S.C. 102(e) as being anticipated by Carey et al (US Pat 6,266,218); the rejection of claim 5 under 35 U.S.C. 102(b) as being anticipated by Lin et al (US Pat 6,185,078); the rejection of claims 1 and 3 under 35 U.S.C. 102(e) as being anticipated by Webb et al (US Pat Publication 2003/0011943); the rejection of claims 1 and 3 under 35 U.S.C. 102(b) as being anticipated by Gill (US Pat 5,867,351); and the rejection of claim 4 under 35 U.S.C.

103(a) as being unpatentable over Gill; such rejections are traversed insofar as they are applicable to the present claims, and reconsideration and withdrawal of the rejections are respectfully requested.

Applicants note that in light of the cancellation of claims 1 and 5 and the amendment of claim 3 to depend from objected to claim 2 which has been written in independent form so as to be in condition for allowance, applicants submit that the rejections of claims 1, 3 and 5 have been obviated by the cancellation or amendment as presented herein. Thus, applicants submit that since the other rejections have been obviated, the only rejection under consideration is the rejection of claim 4 under 35 U.S.C. 103(a) as being unpatentable over Gill, which rejection is traversed and is discussed below.

As to the requirements to support a rejection under 35 U.S.C. 103, reference is made to the decision of In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988), wherein the court pointed out that the PTO has the burden under §103 to establish a prima facie case of obviousness and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. As noted by the court, whether a particular combination might be "obvious to try" is not a legitimate test of patentability and obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. As further noted by the court, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

Furthermore, such requirements have been clarified in the recent decision of In re Lee, 61 USPQ 2d 1430 (Fed. Cir. 2002) wherein the court in reversing an obviousness rejection indicated that deficiencies of the cited references cannot be

remedied with conclusions about what is "basic knowledge" or "common knowledge".

The court pointed out:

The Examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is immaterial to patentability, and could not be resolved on subjected belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher."... Thus, the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion. (emphasis added)

In setting forth the rejection of claim 4 under 35 U.S.C. 103(a) as being unpatentable over Gill, the Examiner recognizes that Gill is silent as to the thickness of the two layers and therefore "the product of the saturation magnetic flux density of the soft-magnetic film multiplied by the film thickness is 1 to 10 multiplied by the product of the saturation magnetic flux density of the free layer of the spin bulb film multiplied by the film thickness" is not specifically disclosed. However, the Examiner contends "as reasonably suggested by figure 12, the soft magnetic layer 304/306 is about 2-3 times the thickness of the free layer 202, and therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the film thickness of the soft-magnetic film 304/306 between 1 and 10 times the thickness of the free layer 202 as doing this provides space for the remaining layers of the MR head (namely the pinned layer and spacer layer)". (emphasis added) Applicants submit that the Examiner's comments concerning obviousness represents a hindsight reconstruction attempt utilizing the principle of "obvious to try" which is

not the standard of 35 U.S.C. 103 (see *In re Fine, supra*), and that the Examiner's position does not relate to the claimed subject matter concerning a product of the saturation magnetic flux density of the soft magnetic film. Moreover, applicants submit that the disclosure of Gill does not set forth thicknesses and the illustration in the drawings is not indicative of thicknesses without a corresponding disclosure in the specification and the recited product relationship is not disclosed or taught. Thus, applicants submit that Gill fails to disclose in the sense of 35 U.S.C. 103 the recited features of claim 4 and claim 4 patentably distinguishes thereover.

Applicants note that the present inventor has determined the relationship as set forth in claim 4 and it cannot be considered obvious from the disclosure of Gill to provide such relationship. That is, Gill does not provide any consideration of ratio to be used for (the saturation magnetic flux density of the soft-magnetic film) • (film thickness)/(the saturation magnetic flux density of the free layer of spin bulb film) •(film thickness). Applicant has determined that since the soft-magnetic layer lets the strength of the magnetic field inflicted to the free layer to decrease even though the ratio of (the saturation magnetic flux density of a soft-magnetic film) •(film thickness)/(the saturation magnetic flux density of the free layer of spin bulb film) •(film thickness) is the same compared to using a permanent magnetic film, it is necessary to increase this ratio to achieve a stable reproduction output. Gill fails to disclose or teach the recited features of claim 4 and applicants note that Gill also does not disclose a permanent magnetic film arranged so as to be in contact with the lower portion of the soft-magnetic film, irrespective of the position set forth by the Examiner. Because of this structure, the magnetic field leakage from the permanent magnetic film to the free layer will be weaker and the stretcher requires a higher ratio for the factor. Thus, applicants submit that claim 4 patentably distinguishes over Gill in the sense of 35 U.S.C. 103 and should be considered allowable thereover.

In view of the above amendments and remarks, applicants submit that in addition to claim 2, which has been objected to and has now been written in independent form and its dependent claims which should now be allowable, claim 4 also patentably distinguishes over the cited art and should be in condition for allowance. Accordingly, applicants request favorable action with respect to all claims remaining in this application.

To the extent necessary, applicant's petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (500.41177X00) and please credit any excess fees to such deposit account.

Respectfully submitted,



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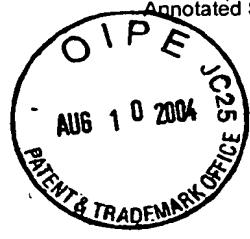


FIG. 4
(PRIOR ART)

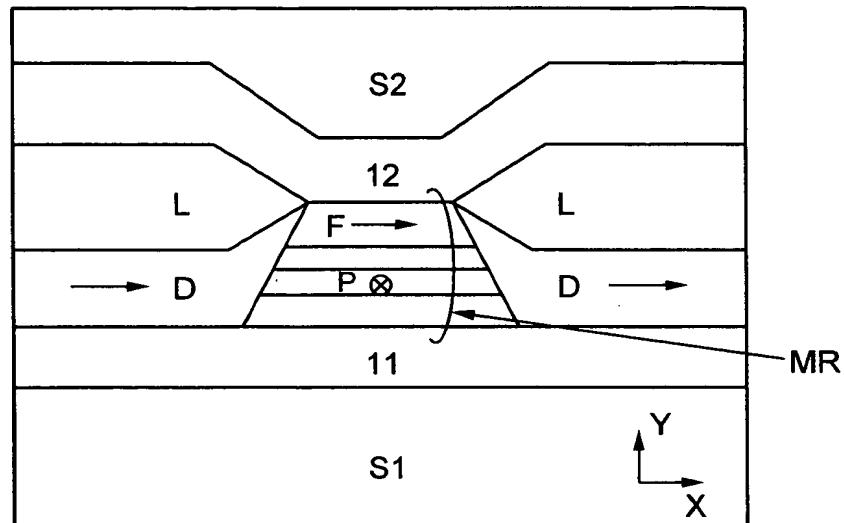


FIG. 5

